2014/15 Columbia University Libraries/Information Services Transitional Strategic Plan

Columbia University Libraries/Information Services (CUL/IS) enters a period of transition following almost fifteen years of sustained leadership and growth. Programs and initiatives have been effectively shaped over multiple strategic planning cycles, with periodic adjustments made in response to emergent environmental changes, be they economic, technological, legal, or societal. These planning processes have served the organization well, resulting in significant growth of Columbia's research collections, in both size and quality, as well as service programs supporting research, teaching and learning, and innovative applications of technology.

An announced change in executive leadership in 2015 will provide a valuable opportunity for CUL/IS to reflect on current practices, take stock of operating realities, and adjust priorities where needed, all in alignment with the evolving research and educational missions of the University. Thus, as the current strategic planning cycle ends, CUL/IS will move forward under a one-year transitional strategic plan, which (1) affirms key elements underlying recent success; (2) responds to important recommendations provided by the internal and external review processes of the recently completed strategic review; and (3) creates space for new executive leadership to guide future planning and priority setting for the organization, in consultation with faculty and students.

Every organization operates within a complex and changing environment, with interactions among multiple factors shaping what is expected, demanded, and possible. To remain vital, organizations must also remain aware, seeking to understand the implications of what is happening and anticipating what is to come. For CUL/IS, this requires understanding and responding to rapid changes in higher education and fluctuations in the global economy; the transformations enabled by the introduction and widespread adoption of digital technologies in teaching and research; the impact of governmental and legal activities on scholarly communications and access to information; the growing need to find and achieve economies of scale through collaborative action and investment; and the realization that new types of work require a more agile organization, as well as new skills for staff.

In recent years, CUL/IS has focused attention and resources on five critical areas:

- growing global and special collections;
- expanding digital collections while sustaining strong investments in print resources;
- building effective interfaces and improved access to scholarly information;
- developing library space; and
- creating a new type of research library, with important roles in supporting teaching and learning, research, and scholarship.

During this period of transition, CUL/IS will continue to focus on strengthening these critical capacities, organizing its collective efforts in the following areas of strategic activity.

Building and Describing Collections

Columbia's collections are among the most distinguished and comprehensive in North American research universities. CUL/IS is committed to the development of general academic collections in print, while also expanding access to electronic resources. CUL/IS acquires 90-100,000 print monographs annually, including publications from all world regions, and much of the output of university and academic presses in North America and Europe.

Several strategic objectives drive CUL/IS collection development efforts: building deep research collections across the disciplines; expanding global collections; growing rare and unique collections; adapting to changes in scholarly communications; developing one of the largest collections of licensed electronic resources in North America; and selectively acquiring databases of digitized historical materials. Over the past several years, however, annual increases in the collections budget have been reduced, providing at best maintenance budgets, leaving less room to respond to new demands and opportunities without attenuating support for core commitments. Recognizing that much of the material available on the open web is of current or future scholarly importance, as well as the need to sustain the chain of evidence for scholarly research using these materials, CUL/IS supports a program of collecting and archiving web content. As digital materials are also an increasingly important component of archival collections, CUL/IS has also advanced a major initiative to enable the acquisition, preservation, and access of born-digital archives.

Understanding that acquisition is only the first step in building deep research collections, CUL/IS focuses particular attention on describing, processing, and organizing both newly acquired materials and those that are hidden to researchers because they are unprocessed or have records that are not yet included in online discovery systems. Strategic activities in this area parallel those related to building collections: improving cataloging for global collections; improving access to special collections; and adapting processes and standards to address new forms of publication. In addition, a strong emphasis has been placed on seeking efficiencies in the description and processing of general research collections in order to free staff time to focus on exposing rare and unique resources.

In 2014/15, CUL/IS will

- Sustain a comprehensive collecting program across the disciplines, including the
 acquisition of scholarly monographs and journals, rare books, manuscripts and
 archival materials, electronic materials in all formats, and specialized disciplinary
 databases.
- Sustain capacities for acquiring distinctive collections, including rare, unique, and international materials in all formats.

- Continue to develop and implement innovative strategies to acquire and preserve
 research materials, such as archiving content from the volatile open web, the open
 access scholarly output of the University, and the growing corpus of born-digital
 content.
- Continue to invest in digitization, description, and dissemination of Columbia's unique, rare, and specialized collections, in all formats.
- Investigate options for describing and managing non-book cultural heritage objects, such as art works, photographs, coins, realia, etc.
- Continue targeting "hidden collections" for processing priority, including the full spectrum of printed and media formats.
- Continue to develop collaborative collection development and technical services partnerships and initiatives with other research libraries to increase capacity for collection building and access.
- Continue to utilize usage and cost data to inform collecting decisions and negotiations with publishers and vendors.

Discovery, Access, Delivery, and Service

Faculty and students now expect a user-friendly, seamless experience while searching for and requesting information in support of their research, teaching, and learning activities. Thus, the CUL/IS website recently underwent a thorough redesign following user-centered information architecture and design principles to improve the information discovery experience. A next generation information discovery system, which integrates search across several fragmented information sources, was developed and implemented, with the promise of continual, incremental improvement based on user feedback. A "scan and deliver" service was implemented to provide rapid, electronic delivery of print journal articles and book chapters; and to better support evolving research and teaching methods, service models across the organization continue to shift to new, more active forms of engagement, often in partnership with faculty members and administrators.

In 2014/15, CUL/IS will

- Continue to improve discovery interfaces (web sites, CLIO, etc.) through rigorous usability testing and feedback from faculty, students, and staff.
- Develop and implement a digital collections viewer, integrated with CLIO, to better expose materials digitized from Columbia's collections.
- Develop a "virtual browsing" capability within CLIO, as recommended by both the internal and external committees during the recent strategic review process.
- Investigate feasibility of user-initiated paging and delivery service for circulating print materials.
- Identify and engage with faculty, students, academic departments, and centers operating in remote locations to plan and implement effective research-support services, including exploring options for better serving researchers associated with the Columbia Global Centers.

Supporting Teaching and Learning

From providing direct support to faculty and their students through instruction sessions and assignment-based research consultations to online course development and assistance in utilizing the course management system, CUL/IS provides an exceptional set of services in support of the teaching and learning missions of the University.

CUL/IS successfully designed and constructed multiple discipline-based digital scholarship centers supporting emerging teaching and research practices in the humanities, music, science and engineering, and the social sciences. These heavily used facilities – over 200,000 sessions by over 17,000 unique users in 2013/14 – offer specialized hardware, advanced software, and consultation services from librarians and technologists in welcoming settings that accommodate both individual work and group collaboration. The Digital Center Intern program, co-funded with the Graduate School of Arts and Sciences (GSAS), supports graduate students interested in increasing their technology skills and marketability inside and outside of the academy, as well as providing training, peer-to-peer teaching, and experiential learning in digital scholarship.

Strong relationships with the Columbia College Writing Center and the GSAS Teaching Center have resulted in several initiatives supporting teaching and learning. The Writing Center offers its writing consultation services within Butler Library, and librarians from across CUL/IS partner with University Writing Program instructors to teach approximately 120 sessions per year to over 1,800 students. The GSAS Teaching Center, located within Butler Library, provides weekly clinics and workshops for graduate students, often in collaboration with staff from several CUL/IS units, including the Columbia Center for New Media Teaching and Learning (CCNMTL), the Center for Digital Research and Scholarship (CDRS), the digital centers, and subject specialist librarians. To support expanded programming of both the Teaching Center and the Digital Humanities Center, Studio@Butler, a space dedicated to advancing pedagogical practice and digital scholarship, was opened, jointly funded by CUL/IS and GSAS. A similar space focused on supporting innovative teaching methods in the sciences and engineering is being planned within the Digital Science Center at the Science & Engineering Library.

Multiple CUL/IS divisions have engaged in developing and advancing teaching and learning services, including playing important roles in the multi-year effort to transition the course management system to the Sakai platform, developing and enhancing online course reserves and research guides, and implementing new platforms, such as EdBlogs, WikiSpaces, WikiScholars, YouTube, and iTunesU. CCNMTL partners with faculty to enhance teaching and learning through the purposeful use of technology, from basic course web sites to advanced online learning projects and products used in hundreds of Columbia courses.

CUL/IS has supported the development of several innovative online courses, most recently Eric Foner's "The Civil War and Reconstruction." CCNMTL produced the

course on the edX platform, utilizing primary sources from the collections of the Rare Book & Manuscript Library. As the University continues to explore and expand support for new forms of online and on-campus learning, CUL/IS will continue to partner with schools and divisions of the University to enhance student learning and faculty support. CUL/IS is a fundamental and critical partner in teaching and learning at Columbia.

In 2014/2015, CUL/IS will

- Continue to educate students about how scholarly information systems work in the disciplines, and how to locate, evaluate, and use information in coursework and research.
- Continue to provide exceptional teaching and learning support through CCNMTL, the digital scholarship centers, subject specialist librarians, curators, and in collaboration with University partners such as GSAS and Columbia College.
- Continue to explore and develop courses in various digital learning environments, including MOOC platforms, hybrid classroom models, and expanding the use of the Canvas learning management system on campus, among others.
- Continue to improve the digital scholarship centers in support of teaching and learning in the humanities, music, sciences and engineering, and social sciences.
- Continue to investigate and implement new forms of emerging technologies in support of teaching and learning, including support for 3D visualization, 3D scanning, and 3D printing, among others.
- Continue to improve support for faculty use of primary source materials in teaching and learning, expanding student access and engagement.
- In partnership with the University, explore options to expand support for academic computing infrastructure and capacity in support of teaching and learning.

Supporting Research

CUL/IS is committed to building robust research collections and ensuring that Columbia's scholars have access to expert librarians with deep subject expertise. Rapid advances in technology, scholarly publishing, and major changes resulting from revised funding agency requirements create opportunities for CUL/IS to take on new roles in support of research. Toward this end, CUL/IS provides research support services tailored to the disciplines, including workshops and individual research consultations, citation management tools, and support for data capture, access, and management, among other services. CUL/IS has begun to develop support services for new scholarly workflows. spur conversations about copyright, licensing, and open access, and engage the University in issues related to research data management and compliance. The Center for Digital Research and Scholarship has developed and promoted a range of research support services, including the Academic Commons digital repository, conference and journal hosting, digital publication services, and various research collaboration platforms. CUL/IS works actively to facilitate the creation of open-access policies within individual schools and colleges, including successful mandates at the Lamont-Doherty Earth Observatory, the Mailman School of Public Health, the School of Social Work, and for

the professional staff of CUL/IS itself. The highly competitive Library Research Awards program offers grants to scholars from across North America to consult Columbia's unique and distinctive collections.

In 2014/15, CUL/IS will

- Continue to develop research support services tailored to the disciplines, including but not limited to workshops and individual research consultations, citation management tools and training, media access and manipulation support, research notes management, and discipline-specific research data capture, access, and curation.
- Working with the Office of the Executive Vice President for Research and other campus units, develop and implement services to support researchers in complying with projected legislation extending data management and open-access mandates for federally funded research.
- Develop and implement a pilot version of ColumbiaPARC, a system to aggregate, manage, and report information about the research and scholarship activities of the University.
- Continue to work actively with faculty and administrators to facilitate the creation of open-access policies within individual schools and colleges.
- Continue to develop and grow Academic Commons as the University's research repository.

Preserving Collections

Research libraries play a unique role in preserving both the scholarly record and the cultural heritage of society. CUL/IS is dedicated to preserving print collections, with an increasing awareness that publications from many world regions are collected in depth by an ever-shrinking handful of North American research libraries. An additional rare book and archives conservator position was recently added, with the assistance of a Mellon Foundation challenge grant. CUL/IS continues to expand the digital conversion of print, audiovisual, and other analog materials, especially those most at risk, while grappling with the challenges of digital storage and preservation. CUL/IS has also embarked on systematic efforts to capture and preserve born-digital materials, recognizing that a growing body of scholarly and cultural content exists only in digital form and may not be collected and published by other institutions or vendors. In order to ensure long-term access to analog and digital collections, CUL/IS continues to invest in ReCAP, the offsite shelving facility managed in partnership with Princeton University and the New York Public Library, as well as expand its long-term archive for digital collections. Digitization is now a primary method for preserving and ensuring long-term access to scholarly materials. CUL/IS has digitized a broad range of Columbia's distinctive and archival materials through local efforts and through partnerships with external vendors.

In 2014/15, CUL/IS will

- Continue investment in ReCAP to sustain Columbia's commitment to ongoing growth in unique global and archival collections and the targeted relocation of lesser-used collections from campus facilities.
- Continue to seek increased resources from endowments, gifts, and collection donors to support conservation of rare and unique materials.
- Continue to work with publishers and national initiatives to expand preservation coverage of electronic journals and to ensure long-term access to commercial collections of electronic books.
- Continue relocation of all locally managed digital collections into the repository and long-term preservation storage system.
- Continue to develop infrastructure, tools, and support needed to provide ongoing access to collections stored in the local digital repository.

Developing Library Space

Sweeping changes in research, teaching, and learning behaviors continue to fuel transformations in how space allocated to library-related activities is deployed at Columbia. With these changes, access to functional, attractive library space continues to be of critical importance to the academic community, especially for students living and working in space-starved Manhattan. Along with the need for student workspace, the continuing shift from print to electronic content for many disciplines rightly forces CUL/IS to justify the retention of on-campus space for the storage of print collections and intensifies the need to invest in offsite storage capacity at ReCAP. Over the past several years CUL/IS has successfully planned and implemented multiple discipline-based digital scholarship centers, each designed to support emerging research methodologies in a technology-rich environment. The continued acquisitions of large archival collections important to future scholarship place growing strain on the space available for storing and processing distinctive collections and will ultimately increase the importance of the availability of offsite shelving. Usage of Columbia's primary source collections continues to grow, while both reader and exhibition space is subpar in relation to peer institutions, pointing to the need for a new, expanded special collections facility. The development of the Manhattanville campus over the next decade or more will create both challenges and opportunities for providing library services to a more distributed clientele.

In 2014/15, CUL/IS will

- Assist external consultants with Provost-sponsored study of library facilities to review current space usage, as recommended by the external review committee during the recent strategic review process, and respond to recommendations for changes and improvements in alignment with University and CUL/IS priorities.
- Continue ongoing, phased renovation projects in several facilities, with goals of expanding and improving user workspaces, more efficiently utilizing shelving capacities, and improving security for special collections.

- Develop an innovation space within the Digital Science Center in the Science & Engineering Library that supports emerging research and teaching methods in the science and engineering disciplines.
- Improve wayfinding at the Butler Library entrance so that services and staff expertise can be more easily located, as recommended by the internal review committee during the recent strategic review process.
- Continue to promote need for a larger, well-designed special collections facility with modern environmental, security, teaching, and exhibition capacities on the Morningside campus.
- Continue to develop partnerships with both the Graduate School of Business and the School of International & Public Affairs to plan and build library service centers within their new facilities on the Manhattanville campus.

Libraries and Information Services as Workplace

The CUL/IS workforce comprises a large, diverse group of professional and support staff with varied technical, disciplinary, and language skills, professional preparation, and work experience. These staff members carry out the work of the organization, from building and maintaining collections to providing research and teaching support services to all of the many administrative tasks that enable CUL/IS to successfully fulfill its role in support of the University's scholarly and educational missions. New roles that support emergent research and teaching activities such as data management and the digital humanities join librarians, archivists, curators, programmers, project managers, and many others to constitute *the new research library*. Enabling staff to flourish within this new research library environment is both challenging and crucial to future organizational success. CUL/IS provides strong professional development and training support for staff, having recently increased reimbursement levels for professional development significantly.

In 2014/15, CUL/IS will

- Continue to develop an organizational culture that values and embraces flexibility, experimentation, and organizational agility at all levels through dynamic staff development and recruitment activities.
- Continue to identify and improve workflows that hinder efficiency and stifle innovation.
- Support additional opportunities for contact, connection, and information sharing across organizational divisions.
- Encourage staff members to take advantage of training opportunities appropriate to their job duties and career development, including local, regional, and national management and leadership training programs, targeting support for staff exhibiting strong potential and interest.
- Respond to service quality assessment results by targeting service training in needed areas.

- Continue to build a flexible technology infrastructure that enables innovation and experimentation, including improving tools that enhance internal communication and collaboration.
- Strengthen information technology infrastructure to support more secure and reliable staff desktop computing and continue the successful hardware and software lifecycle replacement program.
- Continue to evaluate and address custodial and building maintenance needs in work areas across the organization, escalating concerns to University-level administrators when necessary.

Collaborative Initiatives

Collaboration plays a crucial role in realizing many strategic objectives for CUL/IS. Several local and regional initiatives – 2CUL (a collaborative initiative between the research libraries at Columbia and Cornell universities), ReCAP, MaRLI (the Manhattan Area Research Library Initiative), and BorrowDirect (the library resource sharing partnership encompassing eleven Ivies Plus academic institutions) – expand capacity and expertise to collectively devise and support scalable, sustainable solutions to large-scale problems. These partnerships affect planning for building and preserving collections, access services, and the use of library space. Open-source technology development initiatives play an important role in several areas of CUL/IS operations, and active participation in the Fedora (digital repository), Blacklight (discovery interface), and OpenGeoportal (geospatial data) initiatives, among others, is seen as a crucial complement to commercial products, offering community control and distributed development to meet research library needs. Some needs are better met through a centralized infrastructure, with collective action by libraries providing both direction and financial support. Toward this end, CUL/IS supports the LOCKSS (Lots of Copies Keep Stuff Safe) and Portico efforts to ensure e-journal preservation, was the first institution to join the HathiTrust Digital Library after membership expanded beyond the founding members, and has joined the arXiv e-print repository as a supporting member. CUL/IS is also providing financial support to the Digital Preservation Network (DPN) and the Academic Preservation Trust (AP Trust) as those important new collaborative digital preservation programs take shape.

In 2014/15, CUL/IS will

- Continue engagement with and investment in strategically important collaborative initiatives, optimizing activities within existing partnership networks.
- Develop a process for evaluating costs/benefits of current and potential collaborative initiatives, prioritizing partnerships that have the greatest potential to advance CUL/IS strategic goals.
- Encourage staff to increase partnerships with faculty and campus administrative units by leveraging complementary skills in creating new research and teaching projects.

Leadership

In some areas, peer collaborations are not sufficient to achieve organizational goals, and CUL/IS has instead sought to take a leadership position, to influence policy, to steer and build broad-based organizations that can act on a national or international scale, and to incubate new programs as a means of focusing attention on issues and stimulating action. Areas in which CUL/IS exercises strong leadership include information policy, open access to scholarly research, intellectual property rights, collecting and preserving web content, and sustaining access to global resources. New and innovative programs have been supported by numerous and extensive grants from foundations and government agencies.

CUL/IS' leadership is exercised not only at an institutional level but also through individual leadership supported by the organization. Members of CUL/IS serve on boards, advisory groups, and blue-ribbon panels sponsored by publishers, vendors, library organizations, and governmental bodies. CUL/IS staff members influence thought and action in several professional domains by publishing and speaking at professional meetings. Sustaining a high level of professional engagement is seen as a crucial component in meeting strategic objectives.

In 2014/15, CUL/IS will

- Continue to foster and guide major national initiatives through leadership on boards and working groups of AP Trust, DPN, DuraSpace, HathiTrust Digital Library, and Fedora, among many others.
- Continue to explore and implement models for collecting and archiving web content with other research libraries, scholars, and developers.
- Continue to encourage staff to participate on and provide leadership for boards, advisory groups, and task forces sponsored by publishers, vendors, professional organizations, and governmental bodies.
- Continue to encourage a high level of professional engagement by providing release time and financial support for professional travel and training.

Enabling Activities

Several enabling activities support the broad scope of CUL/IS programming – from resource development to communications and marketing, from service quality assessment to a set of publishing initiatives. These functions provide the means necessary for growing capacity across the organization, improving services for students and faculty, and promoting CUL/IS collections and services to the Columbia scholarly community and beyond. In an environment characterized by maintenance budgets for collections and stagnant budgets for operations, resource development (annual giving, grant funding, and the development of major gifts) assumes a critical role in expanding organizational capacity. Another important source of enabling resources is the income CUL/IS generates from various publishing initiatives, including the publication of the *Avery Index to*

Architectural Periodicals and CIAO, Columbia International Affairs Online, published in partnership with the Columbia University Press. CUL/IS maintains active communications and marketing programs, charged with providing support for media relations, marketing, and awareness efforts aimed at the University community, and with improving internal communications practices. In support of enabling a culture of assessment and continual improvement, CUL/IS supports a robust service quality assessment program, serving library users and staff alike through the systematic gathering, analysis, and use of high-quality, actionable data to improve facilities and services and guide decision making and planning efforts.

In 2014/15, CUL/IS will

- Continue to pursue private foundation and governmental granting opportunities to expand organizational capacities to support current and emerging educational and research needs of faculty and students.
- Expand outreach to alumni and friends groups with the goal of growing the prospective donor base for annual giving and major donor development.
- Assist the Office of the Provost in implementing a University Library Committee, reporting to the Provost and comprised of faculty representative of the University as a whole, to ensure effective information exchange with and input from faculty, as recommended by both the internal and external review committees during the recent strategic review process.
- Implement a Student Library Advisory Committee, comprised of students representative of the schools and colleges for which CUL/IS provides primary library services, to ensure effective information exchange with and input from students, as recommended by the external review committee during the recent strategic review process.
- With the Columbia University Press, develop and implement a major revision and upgrade of the platform and interface of CIAO, Columbia International Affairs Online.
- Improve communication structures with faculty and students, specifically communications to and from subject specialists, and increase and improve outreach to faculty and students, as recommended by the internal review committee during the recent strategic review process.
- Investigate options for developing a repository for collecting and accessing organizational data to support effective decision-making.
- Continue to grow coordinated capacity across organizational divisions to support the increasing demand for assessment and evaluation support.